

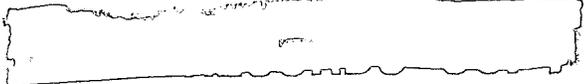
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IMAGERY
ANALYSIS
DIVISION

PIR

PHOTOGRAPHIC INTELLIGENCE REPORT



CHINESE POWER PLANTS

HEILUNGKIANG PROVINCE

Declass Review by
NIMA/DOD



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CIA/PIR 65109



DATE APR. 1966

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GROUP 1
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CIA IMAGERY ANALYSIS DIVISION

CHINESE POWER PLANTS

HEILUNGKIANG PROVINCE

- (A) Chia-mu-suu Thermal Power Plant
- (B) Chi-chi-ha-erh Thermal Power Plant
- (C) Chi-hsi Thermal Power Plant
- (D) Fu-la-erh-chi Thermal Power Plant
- (E) Ha-erh-pin Thermal Power Plant (South)
- (F) Ha-erh-pin Thermal Power Plant (MEIC)
- (G) Tung-ching-cheng Hydro Power Plant

REQUIREMENT

C-RR5-83,218

CIA/IAD PROJECT

30647-6

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CIA IMAGERY ANALYSIS DIVISION

CHIA-MU-SUU THERMAL POWER PLANT

NPIC NUMBER - 31 K

The Chia-mu-suu Thermal Power Plant is located on the eastern outskirts of Chia-mu-suu, China at coordinates 46 49 30N - 130 24 20E. The plant is coal operated, rail served, and includes two sub-stations containing six to eight possible transformers, a control house which adjoins the western end of the generator hall, coal handling and preparation facilities and numerous unidentified support buildings. Cooling water is obtained from the Sung-hua Chiang; cooling towers or spray ponds do not exist.

The power house is equipped with two large free-standing masonry stacks, two small metal stacks, five dust catcher units, and probably contains seven boiler-generator units. There are no visible power connections between the generator hall and sub-stations other than the gallery which links the control house with the sub-station north of the plant.

There has been no new construction between 1963 and 1965.

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CIA IMAGERY ANALYSIS DIVISION

CHIA-MU-SUU THERMAL POWER PLANT

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Light smoke from stack A. Moderate smoke from stack B.
	None	Heavy smoke from stack B precluded exact analysis; however, stack A may be operating moderately.
	None	No smoke could be detected. This mission was of poor quality.
	None	Moderate grey smoke from stack A. Moderate white smoke from stack B.
	None	Possible light smoke from stack A. Moderate smoke from stack B.
	None	Moderate smoke from stacks A and B.

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CIA IMAGERY ANALYSIS DIVISION

CHIA-MU-SUU THERMAL POWER PLANT

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Moderate smoke from stack A. Heavy smoke from stack B.
	None	No smoke observed.
	None	Moderate smoke from stacks A and B. Heavy vapor observed from base of building served by stacks C and D; these stacks, however, were not emitting smoke.

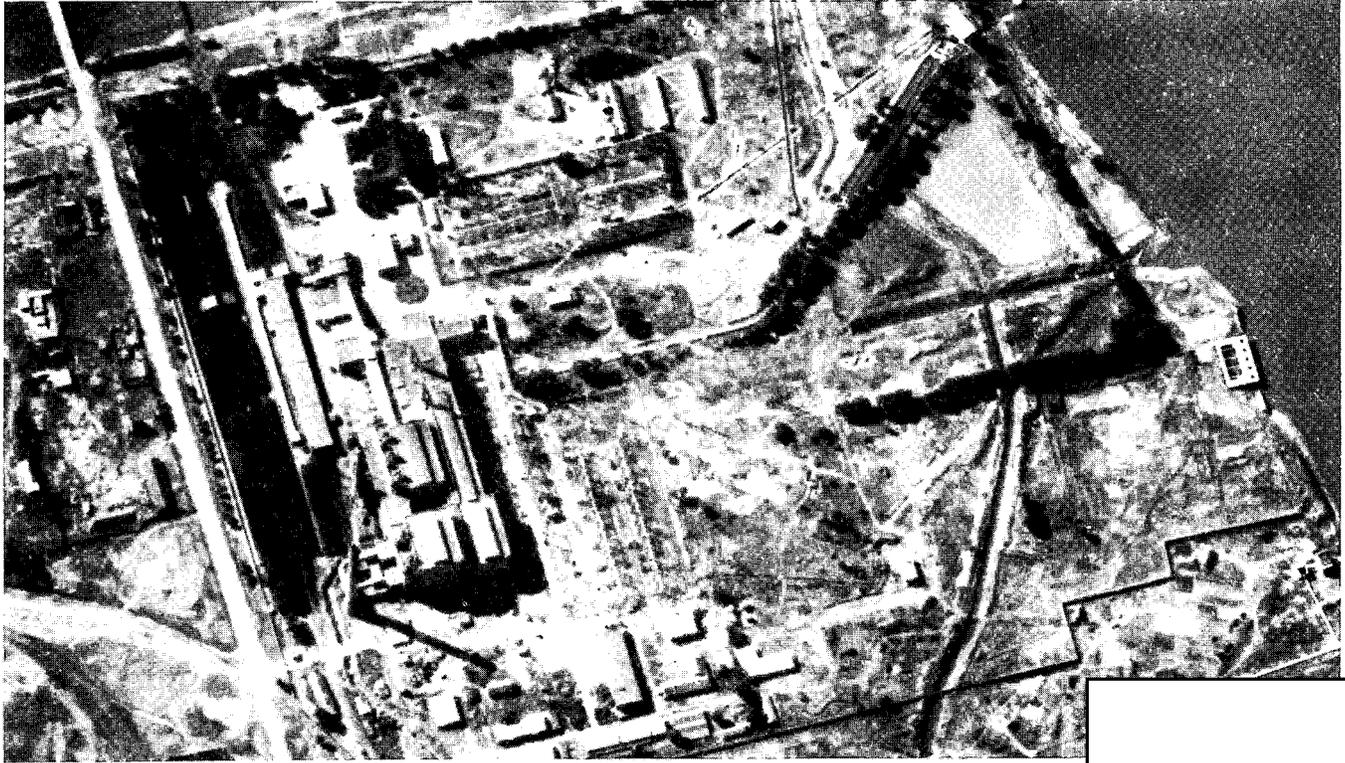
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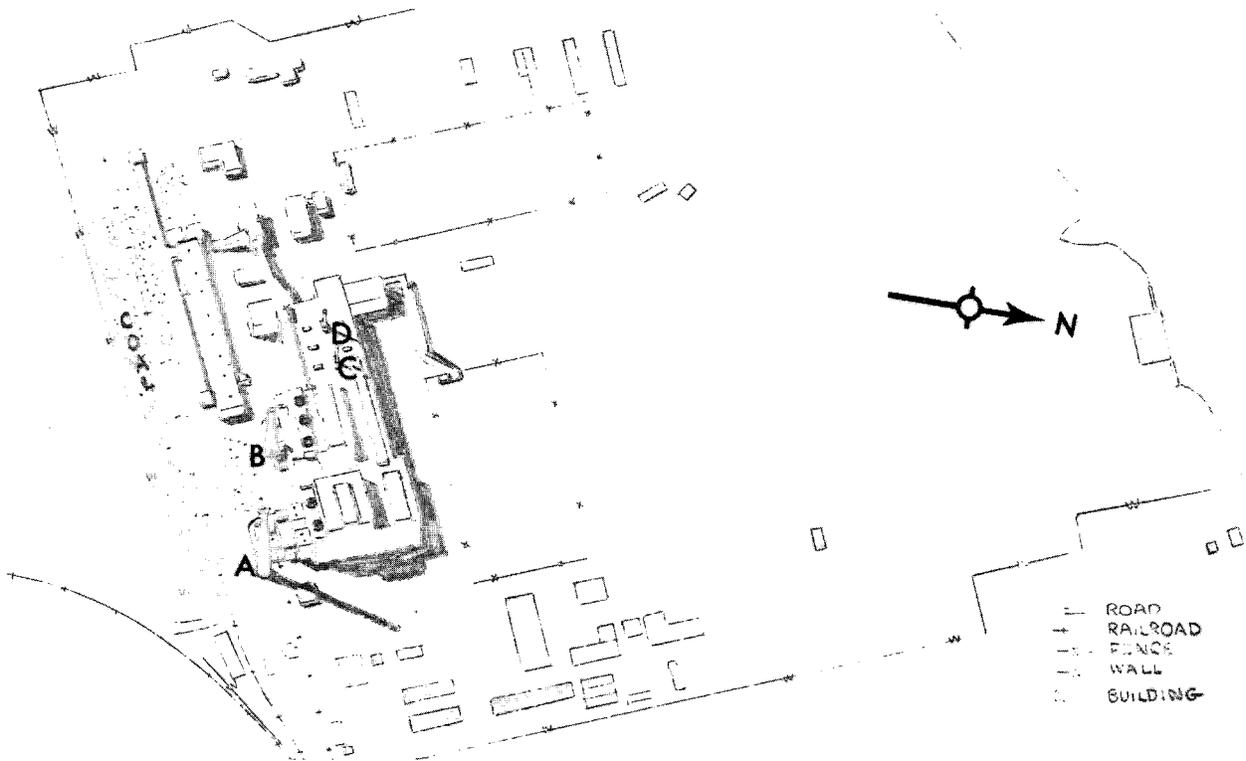
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FIGURE 2

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CHIA-MU-SSU THERMAL POWER PLANT



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CIA IMAGERY ANALYSIS DIVISION

CHI-CHI-HA-ERH THERMAL POWER PLANT

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Chi-chi-ha-erh Thermal Power Plant is located north of the Chi-chi-ha-erh Railroad Yards and Shops at coordinates 47 20 41N - 126 29 30E. The facility is rail served, coal operated, walled, and includes four spray ponds, a sub-station with two probable transformers, several coal stockpiles, and numerous support/storage buildings.

There are five small metal stacks on the roof of the boilerhouse indicating there may be five small boiler generator units. Power cables are not visible leading away from the generator hall; however, there are two evidences of trenches which lead to the sub-station which may indicate buried power cables. The smoke stains on the roof, rail traffic observed inside the facility, and large stockpiles of coal indicate the plant is operable.

There has been no new construction or apparent activity during the specified period from 1963 through 1965.

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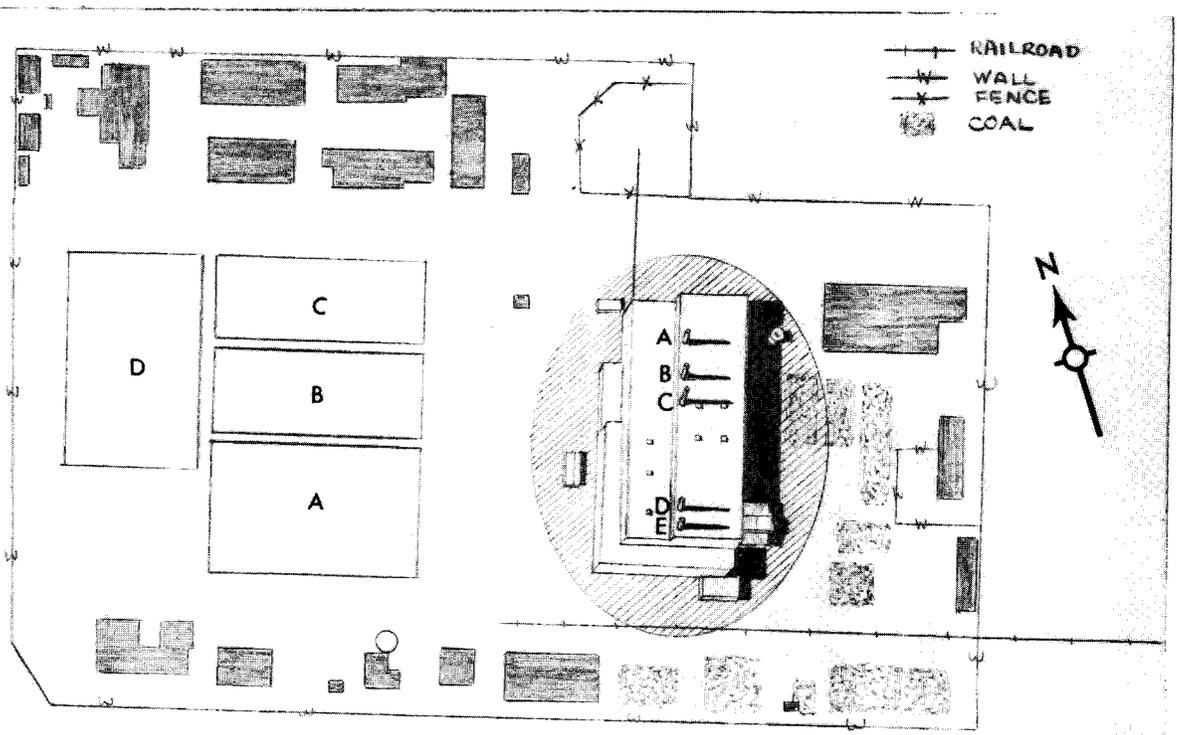
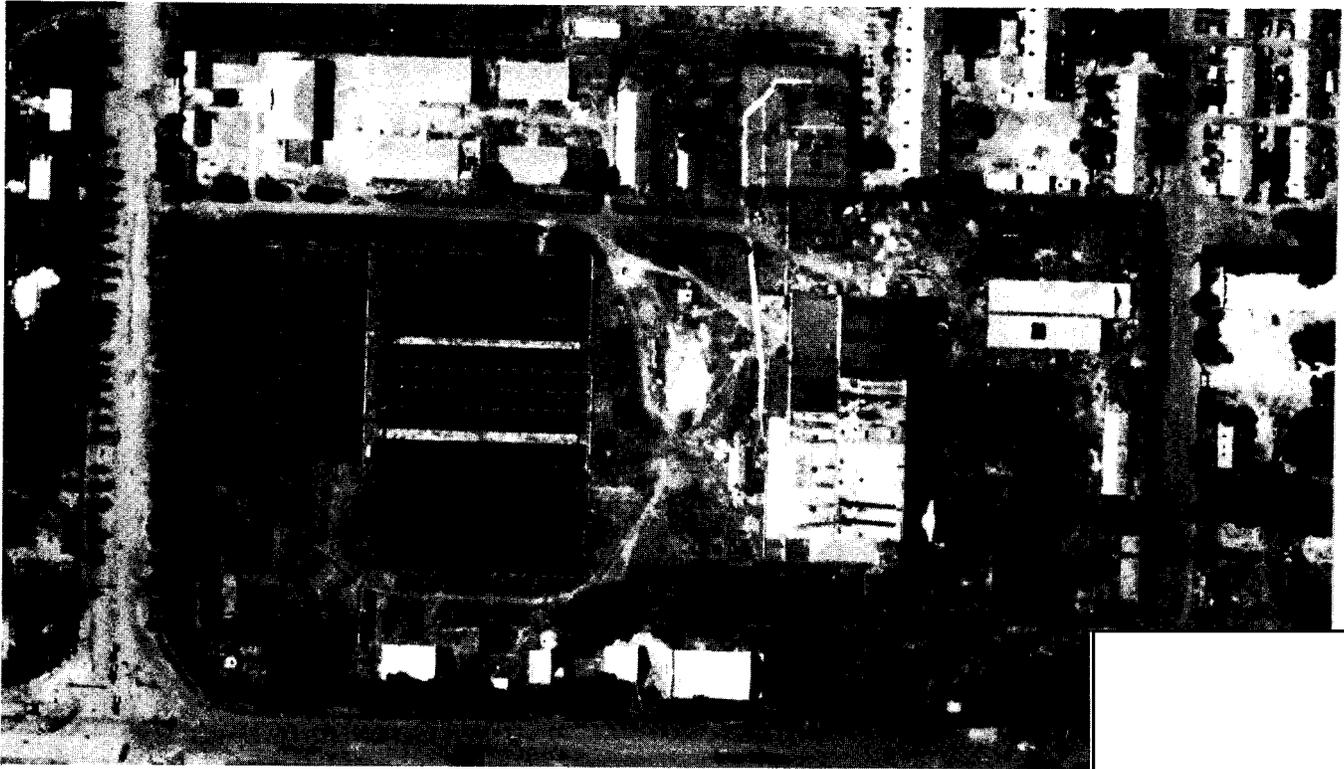
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FIGURE 3

CHI-CHI-1A-ERH THERMAL POWER PLANT



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CIA IMAGERY ANALYSIS DIVISION

CHI-HSI THERMAL POWER PLANT

NPIC NUMBER - 29-B

25X

The Chi-hsi Thermal Power Plant is located within the city of Chi-hsi at coordinates 45 17 30N - 130 53 50E. Good photographic coverage of this facility does not exist and only a general analysis is presently possible.

The plant is rail served, coal operated and includes four cooling towers. The boiler house appears to be equipped with two small probable metal stacks (B and C) and one large masonry stack (A) as shown on the line drawing.

No sub-station, control house or details concerning the generator hall could be determined from available photography.

There was no noticeable construction during the 1963 through 1965 period.

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CHI-HSI THERMAL POWER PLANT

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None apparent	Moderate smoke from stack A. Heavy smoke from stacks B and C. Moderate vapor from three and possibly four cooling towers.
	None apparent	Heavy smoke from stacks A and C. Possible light smoke from stack B. Moderate vapor from three and possibly four cooling towers.
	None apparent	Moderate smoke from stacks A, B, and C. Moderate vapor from cooling towers A and B.
	None apparent	Heavy smoke from stacks A and C. Probable heavy smoke from stack B. Moderate vapor from cooling tower D.
	None apparent	Much smoke and vapor over plant; probably from large stack and 2 or 3 cooling towers.
	None apparent	Heavy smoke from stack A. Moderate smoke from stacks B and C. Heavy vapor from cooling towers C and D. Moderate vapor from cooling tower A. Light vapor from cooling tower B.

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CHI-HSI THERMAL POWER PLANT

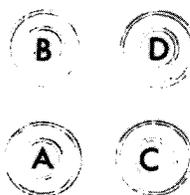
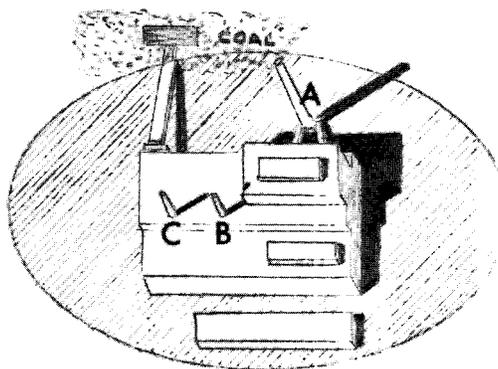
PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None apparent.	Heavy smoke from all stacks. Heavy vapor from cooling towers A and D.

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FIGURE 4

CHI-HSI THERMAL POWER PLANT



BEST PRESENT INFORMATION
ON PLANT CONFIGURATION

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CIA IMAGERY ANALYSIS DIVISION

FU-LA-ERH-CHI THERMAL POWER PLANT

NPLC NUMBER - 36C

The Fu-la-erh-chi Thermal Power Plant is located on the north bank of the Nen Chiang Nonmi between the Fu-la-erh-chi Heavy Machinery Plant and Fu-la-erh-chi Steel Plant at coordinates 47 11 25N - 123 36 33E. The facility is rail-served, coal-operated and includes a substation with control house, small oil storage area and miscellaneous coal handling and support buildings.

The boilerhouse is equipped with five dust-catcher units and is connected to two large masonry stacks by five sets of flues containing two ducts each. This generally indicates that five boiler units are present. The plant appears designed to expand to double its present size. No power-cables could be seen linking the generator hall to the substation, making an assessment of the number of generators impossible.

Construction during the period from 1962-1965 was limited to the addition of two small oil storage tanks between

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CIA IMAGERY ANALYSIS DIVISION

FU-LA-ERH-CHI THERMAL POWER PLANT

PHOTO DATA

CONSTRUCTION ACTIVITY

LEVEL OF PRODUCTION

None

Heavy smoke from stack A.
Moderate smoke from stack B.

None

Moderate smoke from stack A.

None

Moderate smoke from stack A.

None

Heavy smoke from stack A.

None

Moderate smoke from stack A.
Light smoke from stack B.

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FU-LA-ERH-CHI THERMAL POWER PLANT

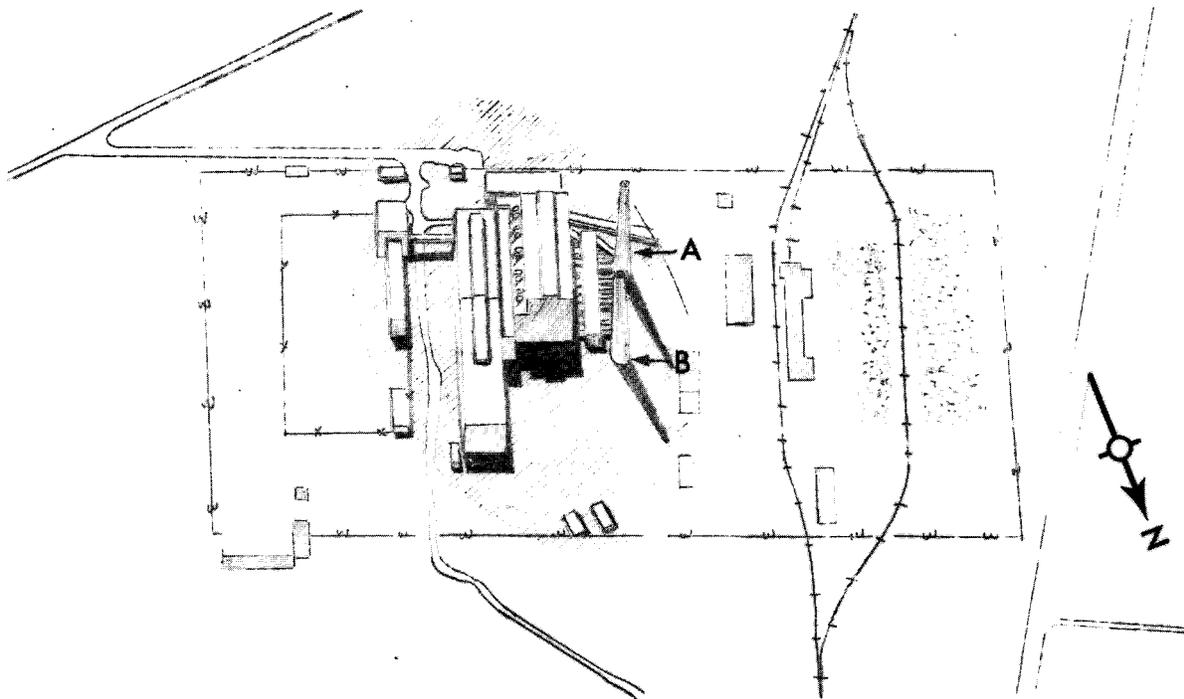
PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Heavy smoke from stack A.
	Two new possible oil tanks have been added north of the plant.	Moderate smoke from both stacks.
	None	Heavy smoke from both stacks A and B.
	None	Moderate smoke is visible from stack A and it appears that stack B is smoking also.
	None	Stacks A and B are smoking heavily.

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FIGURE 5

FU-LA-ERH-CHE THERMAL POWER PLANT



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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT
(SOUTH)

NPIC NUMBER - 42-R

25X

The Ha-erh-pin Thermal Power Plant (South) is located in the southern section of Ha-erh-pin, China at coordinates 45 42 30N - 126 42 00E. This facility is coal operated, rail served and has been operating since [redacted]. The plant includes two natural draft masonry or reinforced concrete cooling towers, sub-station, control house and the usual coal handling and preparation facilities.

25X

The boilerhouse is connected to a single large masonry stack by two sets of flues consisting of four ducts each, suggesting the presence of at least two boiler units. There appears to be space provided for two additional boiler units. The generator hall is linked with the control house and sub-station by four sets of three-cable power leads. Construction at this plant during the specified 1962 through 1965 period was limited to the partial dismantling and reconstruction of cooling tower B between [redacted].

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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT
(SOUTH)

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
[REDACTED]	Partial coverage only; no apparent construction.	Moderate smoke from stack A. Light vapor from cooling tower B.
	None	Moderate smoke from stack A. Moderate vapor from cooling tower A.
	None	Heavy smoke from stack A. Possible light vapor from cooling tower B.
	None	Moderate smoke from stack A. Light vapor from cooling tower A.
	Cooling tower B observed partially dismantled. No other activity.	Moderate smoke from stack A. Light vapor from cooling tower A.
	No apparent change (NAC) [REDACTED]	Moderate smoke from stack A. Heavy vapor from cooling tower A.

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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT
(SOUTH)

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	NAC	Heavy smoke from stack A. Heavy vapor from cooling tower A.
	NAC	Moderate smoke from stack A. Light vapor from cooling tower A.
	Cooling tower B reconstructed. Foundations for probable new cooling tower evident.	Moderate smoke from stack A. Moderate vapor from cooling towers A and B.

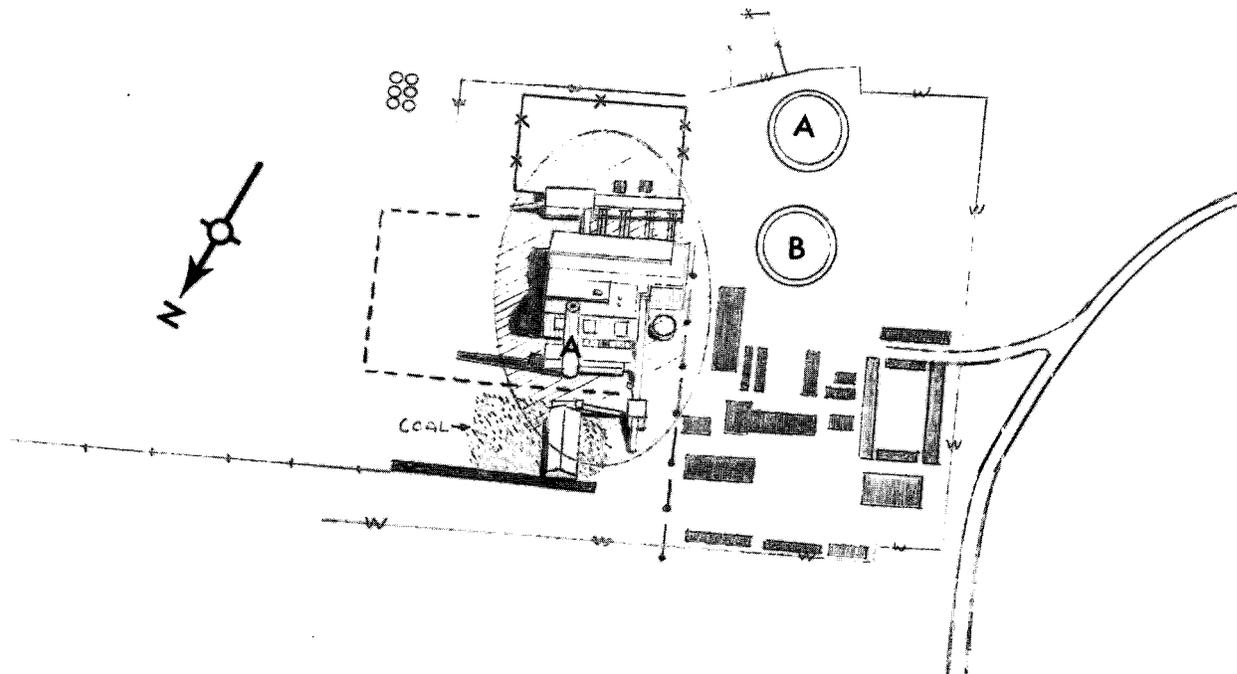
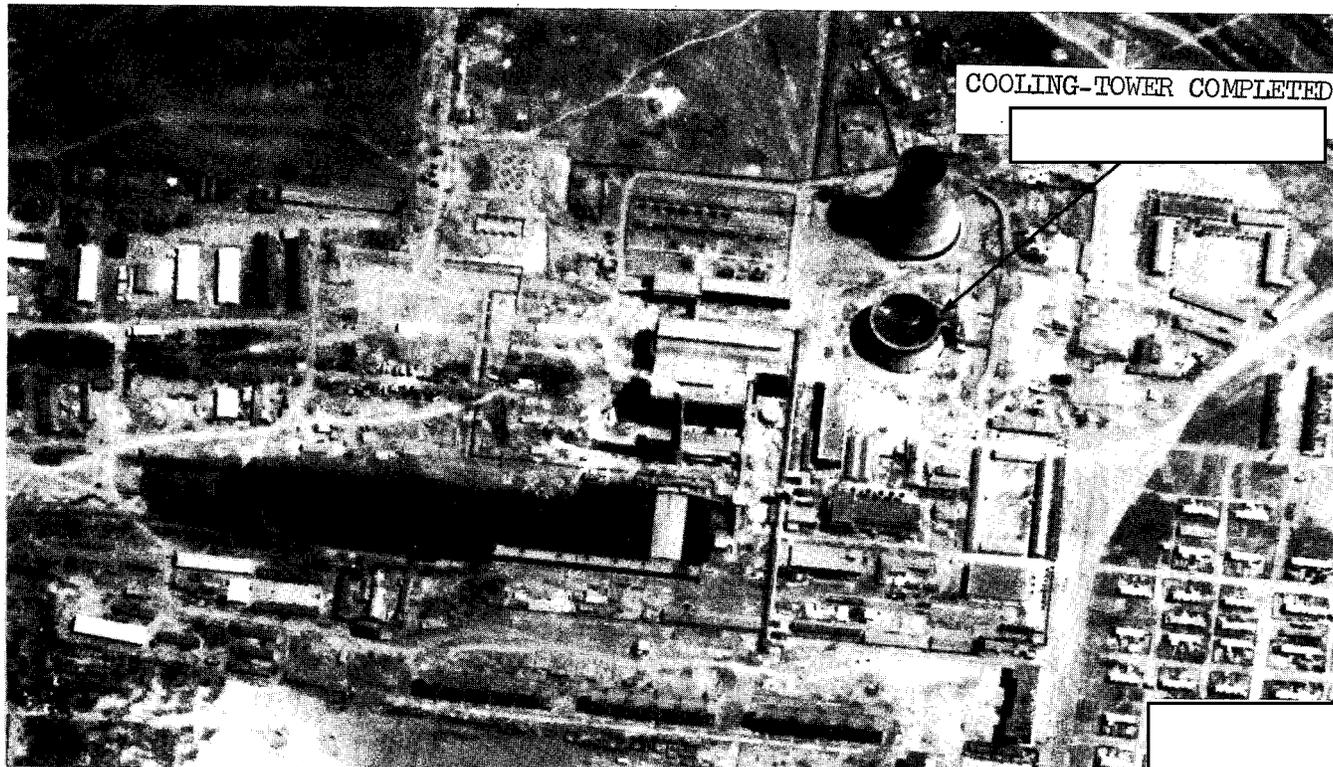
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FIGURE 6

HA-ERH-PIN THERMAL POWER PLANT
(SOUTH)



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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT (MEIC)

NPIC NUMBER - 42-S

The Ha-erh-pin Thermal Power Plant (MEIC) is located one nm west of Harbin Airfield Southwest at coordinates 45 44 20N - 126 38 40E. The plant is coal operated, rail served and includes three large natural draft masonry cooling towers, a sub-station and several unidentified support buildings.

The boilerhouse is served by one large free-standing, masonry stack and five smaller metal stacks; no dust-catching equipment is evident. The generator hall appears to be compartmented into three sections, each equipped with a longitudinal monitor. No power cables could be discerned connecting the generator hall and adjacent sub-station.

There has been no significant construction during the 1962 through 1965 period.

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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT
(MEIC)

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
[REDACTED]	Base for large cooling tower completed. No construction currently underway.	Light smoke from stack D. Very light vapor from cooling towers A and B.
	[REDACTED]	No smoke observed from stacks. Moderate vapor from cooling tower A.
	[REDACTED]	No smoke observed from stacks. Possible light vapor from cooling tower A.
	[REDACTED]	No smoke observed from stacks. Light vapor from cooling tower C. (Poor quality photography)
	[REDACTED]	Moderate smoke from Stack F. Possible light smoke from 1 to 2 small stacks (A-D). Heavy vapor from cooling tower C. Moderate smoke from stacks A, B, E and F. Heavy vapor from cooling tower C.

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CIA IMAGERY ANALYSIS DIVISION

HA-ERH-PIN THERMAL POWER PLANT
(MEIC)

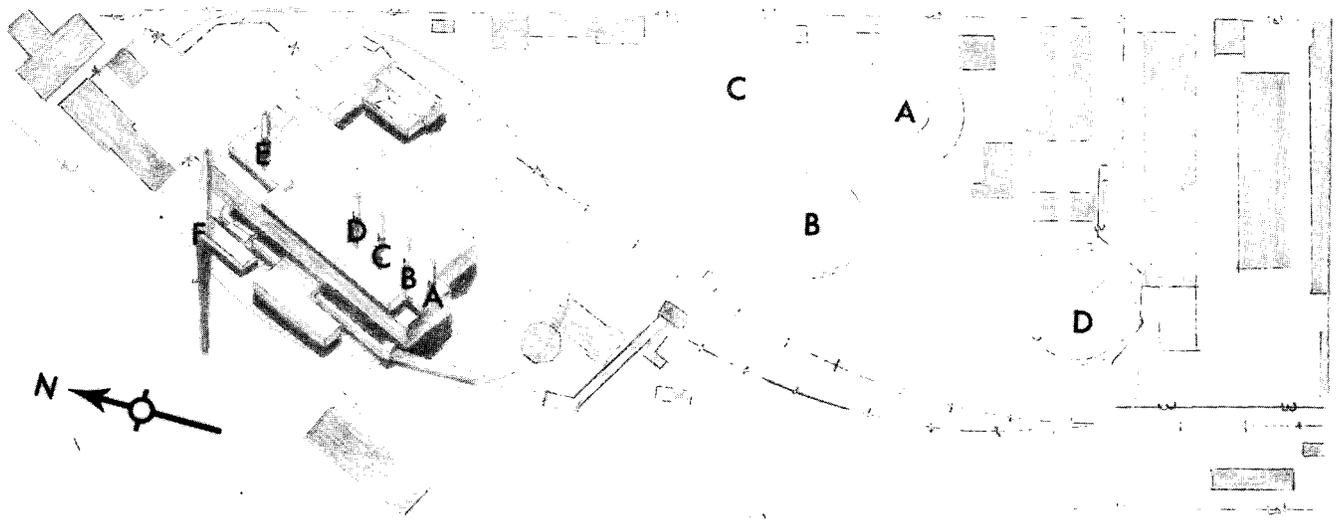
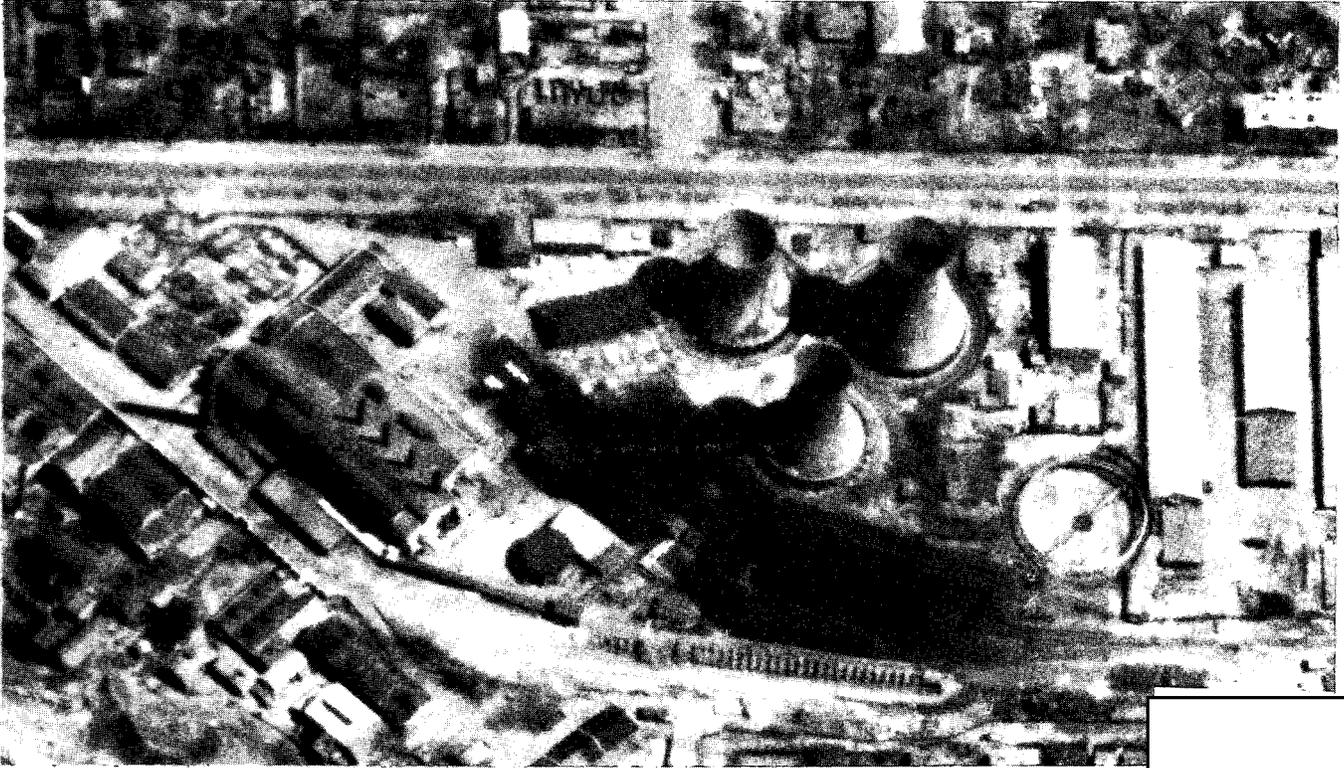
PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	No smoke observed from stacks. Very light vapor from cooling towers A and C.	No smoke observed from stacks. Possible light vapor from cooling tower C. (Poor quality photography)
	No smoke observed from stacks. Moderate vapor from cooling towers A and B. Cooling tower C masked by smoke - may be operating.	

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FIGURE 7

HA-ERH-PIN THERMAL POWER PLANT
(MEIC)



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CIA IMAGERY ANALYSIS DIVISION

TUNG-CHING-CHENG HYDRO POWER PLANT

NPIC NUMBER 00

The Tung-ching-cheng Hydro Power Plant is located on the Mu-tan Chiang (River) 10.5 nm southwest of Tung-ching-cheng Airfield at coordinates 44 03 15N - 128 58 10E.

Water is drawn from the Cheng-po-hu (Lake) at a point 1.5 nm south of the installation and carried through buried conduits to a surge tank and then via two above-ground penstocks to the generator hall. As no large-scale photography of this facility exists, it is impossible to accurately assess the extent of switching and transformer equipment located in the sub-station immediately west of the generator hall.

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CIA IMAGERY ANALYSIS DIVISION

TUNG-CHING-CHENG HYDRO POWER PLANT

K1

25X

K1

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	Turbulence observed at base of power house.
	None	Turbulence observed at base of power house.
	None	Turbulence observed at base of power house.
	None	No turbulence observed.
	None	No turbulence observed.
	None	Much turbulence observed at base of power house.

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CIA IMAGERY ANALYSIS DIVISION

TING-CHING-CHENG HYDRO POWER PLANT

PHOTO DATA	CONSTRUCTION ACTIVITY	LEVEL OF PRODUCTION
	None	No turbulence observed; however, water down-stream from power house is free of ice.

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[redacted]

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FIGURE 8

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TUNG-CHING-CHENG HYDRO POWER PLANT



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